[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2015-0251; Directorate Identifier 2014-NM-200-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A318, A319, A320, and A321 series airplanes. This proposed AD was prompted by a determination that, in specific flight conditions, the allowable load limits on the vertical tail plane could be reached and possibly exceeded. Exceeding allowable load could result in detachment of the vertical tail plane. This proposed AD would require modification of the pin programming flight warning computer (FWC) to activate the stop rudder input warning (SRIW) logic; and an inspection to determine the part numbers of the FWC and the flight augmentation computer (FAC), and replacement of the FWC and FAC if necessary. We are proposing this AD to prevent detachment of the vertical tail plane and consequent loss of control of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
   20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
   West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE.,
   Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Airbus,

Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airwortheas@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton,

WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0251; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2015-0251; Directorate Identifier 2014-NM-200-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2014-0217, dated September 26, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Model A318, A319, A320, and Model A321 series airplanes. The MCAI states:

During design reviews that were conducted following safety recommendations related to in-service incidents and one accident on another aircraft type, it has been determined that, in specific flight conditions, the allowable load limits on the vertical tail plane could be reached and possibly exceeded.

This condition, if not corrected, could lead, in the worst case, to detachment of the vertical tail plane in flight and consequent loss of the aeroplane.

To prevent such a possibility, Airbus has developed modifications within the flight augmentation computer (FAC) to reduce the vertical tail plane stress and to activate a conditional aural warning within the flight warning computer (FWC) to further protect against pilot induced rudder doublets.

For the reasons described above, this [EASA] AD requires installation and activation of the stop rudder input warning (SRIW) logic.

In addition, this [EASA] AD requires, prior to or concurrent with modification of an aeroplane with the activation of the SRIW, upgrades of the FAC and FWC, to introduce the SRIW logic and SRIW aural capability, respectively. After modification, this [EASA] AD prohibits installation of certain Part Number (P/N) FWC and FAC.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0251.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A320-22-1480, dated July 9, 2014. The service information describes procedures for modifying the pin programming to activate the SRIW logic.

Airbus has also issued the following service bulletins. The service information describes procedures for replacing FWCs and FACs.

- Airbus Service Bulletin A320-22-1375, dated January 15, 2014.
- Airbus Service Bulletin A320-22-1427, Revision 04, dated February 11, 2014.
- Airbus Service Bulletin A320-22-1447, Revision 01, dated September 18,
   2014.
- Airbus Service Bulletin A320-22-1461, Revision 04, dated September 15,
   2014.
- Airbus Service Bulletin A320-31-1414, Revision 03, dated September 15,
   2014.

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. This service information is reasonably available; see ADDRESSES for ways to access this service information.

#### FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because

we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

# **Explanation of "RC" Procedures and Tests in Service Information**

The FAA worked in conjunction with industry, under the Airworthiness

Directives Implementation Aviation Rulemaking Committee (AD ARC), to enhance the

AD system. One enhancement was a new process for annotating which procedures and
tests in the service information are required for compliance with an AD. Differentiating
these procedures and tests from other tasks in the service information is expected to
improve an owner's/operator's understanding of crucial AD requirements and help
provide consistent judgment in AD compliance. The actions specified in the service
information identified previously include procedures and tests that are identified as RC
(required for compliance) because these procedures have a direct effect on detecting,
preventing, resolving, or eliminating an identified unsafe condition.

As specified in a NOTE under the Accomplishment Instructions of the specified service information, procedures and tests identified as RC must be done to comply with the proposed AD. However, procedures and tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an alternative method of compliance (AMOC), provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC will require approval of an AMOC.

#### **Costs of Compliance**

We estimate that this proposed AD affects 953 airplanes of U.S. registry.

We also estimate that it would take about 3 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$243,015, or \$255 per product.

In addition, we estimate that any necessary follow-on actions would take about 6 work-hours (3 work-hours for an FWC and 3 work-hours for an FAC), for a cost of up to \$510 per product. We have received no definitive data that would enable us to provide part cost estimates for the on-condition actions specified in this proposed AD. We have no way of determining the number of aircraft that might need these actions.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2015-0251; Directorate Identifier 2014-NM-200-AD.

#### (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

# (c) Applicability

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1) through (c)(4) of this AD, all manufacturer serial numbers.

- (1) Airbus Model A318-111, -112, -121, and -122 airplanes.
- (2) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.
- (4) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

#### (d) Subject

Air Transport Association (ATA) of America Code 22, Auto flight; 31, Instruments.

## (e) Reason

This AD was prompted by a determination that, in specific flight conditions, the allowable load limits on the vertical tail plane could be reached and possibly exceeded.

Exceeding allowable load could result in detachment of the vertical tail plane. We are issuing this AD to prevent detachment of the vertical tail plane and consequent loss of control of the airplane.

#### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

#### (g) Pin Programming Modification

Within 48 months after the effective date of this AD, modify the pin programming to activate the stop rudder input warning (SRIW) logic, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-22-1480, dated July 9, 2014.

# (h) Inspection to Determine Part Numbers (P/Ns), Flight Warning Computer (FWC) and Flight Augmentation Computer (FAC) Replacement

Prior to or concurrently with, the actions required by paragraph (g) of this AD: Inspect the part numbers of the FWC and the FAC installed on the airplane. If any FWC or FAC having a part number identified in paragraph (h)(1) or (h)(2) of this AD, as applicable, is installed on an airplane, prior to or concurrently with, the actions required by paragraph (g) of this AD, replace all affected FWCs and FACs with a unit having a part number identified in paragraph (h)(3) of this AD, in accordance with the Accomplishment Instructions of the applicable Airbus service bulletins specified in paragraph (i) of this AD.

(1) Paragraphs (h)(1)(i) through (h)(1)(xvii) of this AD identify FWCs having part numbers that are non-compatible with the SRIW activation required by paragraph (g) of this AD.

- (i) 350E017238484 (H1D1).
- (ii) 350E053020303 (H2E3).
- (iii) 350E016187171 (C5).
- (iv) 350E053020404 (H2E4).
- (v) 350E017248685 (H1D2).
- (vi) 350E053020606 (H2F2).
- (vii) 350E017251414 (H1E1).
- (viii) 350E053020707 (H2F3).
- (ix) 350E017271616 (H1E2).
- (x) 350E053021010 (H2F3P).
- (xi) 350E018291818 (H1E3CJ).
- (xii) 350E053020808 (H2F4).
- (xiii) 350E018301919 (H1E3P).
- (xiv) 350E053020909 (H2-F5).
- (xv) 350E018312020 (H1E3Q).
- (xvi) 350E053021111 (H2-F6).
- (xvii) 350E053020202 (H2E2).
- (2) Paragraphs (h)(2)(i) through (h)(2)(xxxiv) of this AD identify FACs having part numbers that are non-compatible with the SRIW activation required by paragraph (g) of this AD.
  - (i) B397AAM0202.
  - (ii) B397BAM0101.

- (iii) B397BAM0512.
- (iv) B397AAM0301.
- (v) B397BAM0202.
- (vi) B397BAM0513.
- (vii) B397AAM0302.
- (viii) B397BAM0203.
- (ix) B397BAM0514.
- (x) B397AAM0303.
- (xi) B397BAM0305.
- (xii) B397BAM0515.
- (xiii) B397AAM0404.
- (xiv) B397BAM0406.
- (xv) B397BAM0616.
- (xvi) B397AAM0405.
- (xvii) B397BAM0407.
- (xviii) B397BAM0617.
- (xix) B397AAM0506.
- (xx) B397BAM0507.
- (xxi) B397BAM0618.
- (xxii) B397AAM0507.
- (xxiii) B397BAM0508.
- (xxiv) B397BAM0619.

(xxv) B397AAM0508.

(xxvi) B397BAM0509.

(xxvii) B397BAM0620.

(xxviii) B397AAM0509.

(xxix) B397BAM0510.

(xxx) B397CAM0101.

(xxxi) B397AAM0510.

(xxxii) B397BAM0511.

(xxxiii) B397CAM0102.

(xxxiv) Soft P/N G2856AAA01 installed on hard P/N C13206AA00.

- (3) Paragraphs (h)(3)(i) through (h)(3)(iv) of this AD identify the FWCs and FACs having the part numbers that are compatible with SRIW activation required by paragraph (g) of this AD.
- (i) For airplane configurations with no sharklet, an FAC having P/N B397BAM0621 (621 hard B).
- (ii) For airplanes configured with sharklet A320 and A319, an FAC having P/N B397BAM0622 (622 hard B).
- (iii) For airplanes configured with sharklet A321, an FAC having P/N B397BAM0623 (623 hard B).
- (iv) For all airplane configurations, an FAC having soft P/N G2856AAA02 installed on hard P/N C13206AA00 (CAA02 hard C) and FWC having P/N 350E053021212 (H2-F7).

#### (i) Service Bulletins for Actions Required by Paragraph (h) of this AD

Do the actions required by paragraph (h) of this AD in accordance with the Accomplishment Instructions of the applicable Airbus service bulletin specified in paragraphs (i)(1) through (i)(5) of this AD.

- (1) Airbus Service Bulletin A320-22-1375, dated January 15, 2014 (FAC 621 Hard B).
- (2) Airbus Service Bulletin A320-22-1427, Revision 04, dated February 11, 2014 (FAC 622 Hard B).
- (3) Airbus Service Bulletin A320-22-1447, Revision 01, dated September 18, 2014 (FAC A02 Hard C).
- (4) Airbus Service Bulletin A320-22-1461, Revision 04, dated September 15, 2014 (FAC 623 Hard B).
- (5) Airbus Service Bulletin A320-31-1414, Revision 03, dated September 15, 2014 (FWC H-F7).

#### (j) Exclusion from Actions Required by Paragraphs (g) and (h) of this AD

An airplane on which Airbus Modification 154473 has been embodied in production is excluded from the requirements of paragraphs (g) and (h) of this AD, provided that, within 30 days after the effective date of this AD, an inspection of the part numbers of the FWC and the FAC installed on the airplane is done to determine that no FWC having a part number listed in paragraph (h)(1) of this AD, and no FAC having a part number part number listed in listed in paragraph (h)(2) of this AD, has been installed on that airplane since date of manufacture. A review of airplane maintenance records is

acceptable in lieu of this inspection if the part numbers of the FWC and FAC can be conclusively determined from that review. If any FWC or FAC having a part number identified in paragraph (h)(1) or (h)(2) of this AD, as applicable, is installed on a post-modification 154473 airplane: Within 30 days after the effective date of this AD, do the replacement required by paragraph (h) of this AD.

#### (k) Parts Installation Prohibitions

After modification of an airplane as required by paragraphs (g), (h), and (j) of this AD: Do not install on that airplane any FWC having a part number listed in paragraph (h)(1) of this AD or any FAC having a part number listed in paragraph (h)(2) of this AD.

# (l) Later Approved Parts

Installation of a version (part number) of the FWC or FAC approved after the effective date of this AD is an approved method of compliance with the requirements of paragraph (h) or (j) of this AD, provided the requirements specified in paragraphs (l)(1) and (l)(2) of this AD are met.

- (1) The version (part number) must be approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).
- (2) The installation must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA DOA.

#### (m) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using the Airbus service information identified in paragraphs (m)(1) through (m)(12) of this AD. This service information is not incorporated by reference in this AD.

- (1) Airbus Service Bulletin A320-22-1427, dated January 25, 2013.
- (2) Airbus Service Bulletin A320-22-1427, Revision 01, dated July 30, 2013.
- (3) Airbus Service Bulletin A320-22-1427, Revision 02, dated October 14, 2013.
- (4) Airbus Service Bulletin A320-22-1427, Revision 03, dated November 8, 2013.
- (5) Airbus Service Bulletin A320-22-1447, dated October 18, 2013.
- (6) Airbus Service Bulletin A320-22-1461, dated October 31, 2013.
- (7) Airbus Service Bulletin A320-22-1461, Revision 01, dated February 25, 2014.
- (8) Airbus Service Bulletin A320-22-1461, Revision 02, dated April 30, 2014.
- (9) Airbus Service Bulletin A320-22-1461, Revision 03, dated July 17, 2014.
- (10) Airbus Service Bulletin A320-31-1414, dated December 19, 2012.
- (11) Airbus Service Bulletin A320-31-1414, Revision 01, dated March 21, 2013.
- (12) Airbus Service Bulletin A320-31-1414, Revision 02, dated July 30, 2013.

#### (n) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In

accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

- (2) Required for Compliance (RC): If the service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures and tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.
- (3) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane

Directorate, FAA; or the EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

# (o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0217, dated September 26, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0251.

(2) For service information identified in this AD, contact Airbus, Airworthiness

Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone

+33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com;

Internet http://www.airbus.com. You may view this service information at the FAA,

Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information

on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 19, 2015.

John P. Piccola, Jr.,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2015-04504 Filed: 3/4/2015 08:45 am; Publication Date: 3/5/2015]

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